

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application No.: 10/697,671

Filing or 371(c) Date: 10/29/2003

First Named Applicant: John H. Harrison, Jr.

Title: A Navigation Control System

Art Unit: 3661

ABSTRACT

A real-time path-directed controller for navigating an object along a desired path is disclosed. The controller comprises: a position sensor which contributes to the production of a conditioned object position signal to a controller summer; a heading conditioning module which contributes to the production of a conditioned heading signal to the controller summer; a control apparatus sensor which contributes to the production of a conditioned control apparatus signal to the controller summer; and a control apparatus null position conditioning module which contributes to the production of a conditioned null position signal to the controller summer. The controller summer sums the signals to produce a controller summer signal to a controller summer conditioning module so as to produce a control apparatus control signal to a control apparatus controller so as to direct the control apparatus and thereby direct the object by feedback control along the desired path.